Carbon Monoxide

Carbon monoxide is a colorless and odorless gas that is directly emitted as a product of combustion. The highest concentrations are generally associated with cold stagnant weather conditions that occur during winter. In contrast to ozone, which tends to be a regional pollutant, CO problems tend to be localized.

Carbon monoxide is highly toxic because it is readily absorbed through the lungs into the blood, where it binds with hemoglobin and reduces the ability of the blood to carry oxygen. As a result, insufficient oxygen reaches the heart, brain, and other tissues. The harm caused by CO can be critical for people with heart disease (angina), chronic lung disease, or anemia, as well as for unborn children. Even healthy people exposed to high levels of CO can experience headaches, fatigue, slow reflexes, and dizziness. Health damage caused by CO is of greater concern at high elevations where the air is less dense, aggravating the consequences of reduced oxygen supply. As a result, California's CO standard is more stringent for the Lake Tahoe Air Basin.

State CO Standards:

20 ppm for 1 hour *and* 9.0 ppm for 8 hours, neither to be exceeded.

6 ppm for 8 hours (Lake Tahoe Air Basin only), not to be equaled or exceeded.

National CO Standards:

35 ppm for 1 hour *and* 9 ppm for 8 hours, neither to be exceeded more than once per year.

Table 1-4